TOOLBOX GENOMICS

Health Enrichment

Health Action Plan

October 1, 2019

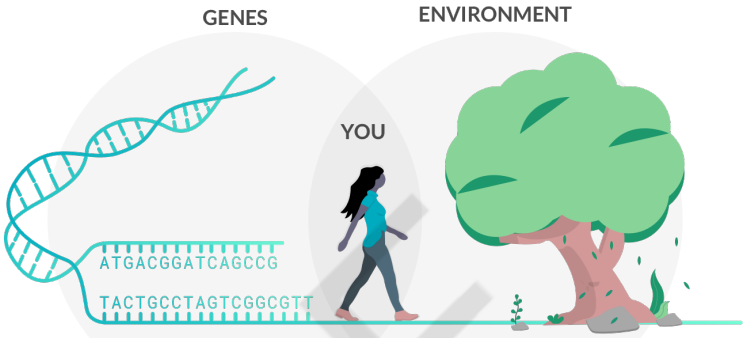
Demo Client

Kit #1234ABCD5678

Table of Contents

Understand Your Genetics

This report is broken down into three main sections: Trait Impact, Recommendations and Trait Detail. Depending on the number of traits being reviewed, your report will contain multiple trait and recommendation detail sections. Terms and sections of the report are defined below.



DNA

DNA is a long, ladder-shaped molecule. The rungs of the ladder are made of two amino acids pairing together, these are called bases. They always pair the same way, A (Adenine) with T (Thymine), and C (Cytosine) with G (Guanine). The body is constantly replicating DNA strands.

GENE

Genes are the basic units of heredity (passed down from generation to generation). They are made of DNA and provide the instructions for how our body works, what we look like, etc. Humans have between 20,000 - 25,000 genes. We inherit half of them from our mother and half from our father.

SNP

A SNP is a Single Nucleotide Polymorphism. SNPs occur when the amino acids making up the base pair do not come together in the same way as the original DNA strand. For example, the original strand may have had an A but the replicated strand has a G. SNPs are common and many of them have no impact to the individual, however, some can change how our body works.

VARIANT

Variants are how SNPs are referred to in this report. When the amino acid in the copied strand is different from the original, it is called a variant - it varies from the original. Variants are not necessarily 'good' or 'bad' they are simply different from the original. The depiction of variants is shown as: +/+ (both copies have different amino acids), +/- (one copy has a different amino acid), -/- (both copies have the same amino acid as the original) or U (one copy is indeterminate).

Reading This Report

Trait	Impact Score
Trait Name	

Gene	SNP/RSID	Varient
SMPL	ex1234567	+ −

Trait Recommendations

1 Trait Impact

This report focuses on traits. These are typically groups of SNPs that have a similar impact on the body's function. We use a proprietary algorithm to determine the impact a group of SNPs may have on a specific function in the body based on your individual test results.

2 Traits

The traits in our reports are typically grouped by body function, a symptom type, a disease, a nutrient need, or a response to environment. Within the trait pages, you will see the SNPs that are looked at for that trait, your variant type and recommendations to optimize health and minimize risk based on your individual results.

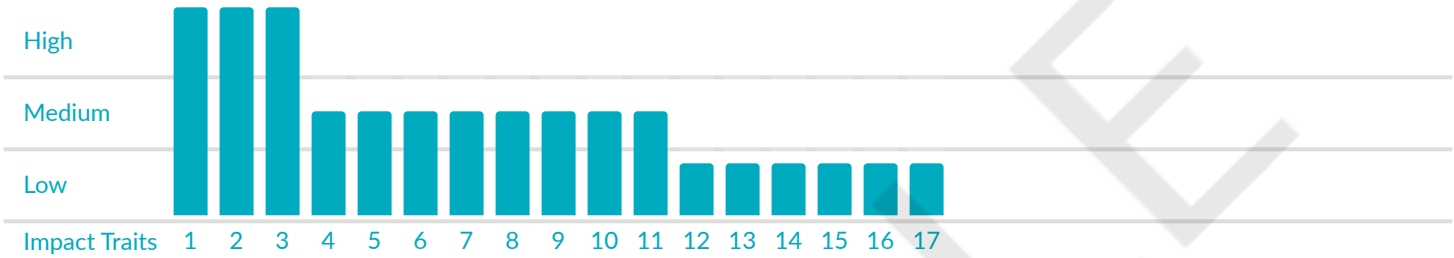
3 Recommendations

Your genes, and therefore your SNPs, will not change during your life. However, this report focuses on SNPs whose impact can be influenced by external factors like diet, exercise, supplements, and lifestyle changes.

Disclaimer - The recommendations in this report have been carefully prepared and reviewed for you by your health and wellness provider, based on his or her reasoned medical judgment about your personal health needs. Be sure that you have shared with your health and wellness provider all relevant information about your health, including any medications or dietary supplements you may be taking, and any medical conditions you may be experiencing, before you adopt any of these recommendations. This test is performed via DNA sequencing. As with all genetic testing with the highest possible standards, the data generated during the laboratory process will have a <99% sensitivity and specificity.

How These Traits Affect You

This page provides a high-level snapshot of the clinical significance of each trait within this panel. The results are in two categories: traits that are ranked high, medium or low impact as well as traits for which there is an explicit result (i.e. categorical such as "yes" or "no"). At the end of this page are a summary of any non-reportable (NR) traits. The results for these traits are unable to be determined from the sample submitted. Recommendations are made for traits with high or medium impact only.



Impact Traits	Impact	Learn More
1 Calcium	HIGH	Page 12
2 Heart Health	HIGH	Page 13
3 Injury Risk - Disc Degeneration	HIGH	Page 15
4 Aging	MEDIUM	Page 16
5 Folate	MEDIUM	Page 17
6 Motivation to Exercise	MEDIUM	Page 18
7 Obesity Predisposition	MEDIUM	Page 19
8 Saturated Fat Response	MEDIUM	Page 20
9 Stress Response	MEDIUM	Page 21
10 Vitamin B12	MEDIUM	Page 22
11 Vitamin D3	MEDIUM	Page 23
12 Blue Light Sensitivity	LOW	
13 Exercise & Fat Loss	LOW	
14 Lactose Intolerance	LOW	
15 Response to Endurance Training	LOW	
16 Sleep Impairment	LOW	
17 Yo-Yo Dieting	LOW	

Categorical Traits	Result	Learn More
1 Caffeine-Related Anxiety	Increased	Page 24
2 Iron	Normal	Page 25
3 Caffeine Metabolism	Slow	Page 26
4 Muscle Fiber Type	Slow Twitch	Page 27

Supplements

Below is a list of the top recommended supplements curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Supplement sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 **Magnesium**	Supplement with 300 - 500 mg of magnesium per day.	Calcium, Heart Health, Motivation to Exercise, Stress Response
2 **Conjugated Linoleic Acid (CLA)**	Supplement with 2 - 4 g of conjugated linoleic acid (CLA) per day.	Heart Health, Obesity Predisposition
3 **Folate**	Supplement with 400 - 800 mcg of methyl-folate per day.	Aging, Folate
4 **Omega-3**	Supplement with 2 - 5 g of omega-3 fatty acid supplement that contains essential fatty acids DHA and EPA.	Heart Health, Motivation to Exercise
5 **Probiotics**	Supplement with a 10 - 50 billion CFU probiotic per day.	Heart Health, Vitamin D3
6 **Vitamin D3**	Supplement with 3,000 IUs of vitamin D3 per day.	Calcium, Vitamin D3
7 **Berberine**	Supplement with 1,500 mg of berberine per day.	Heart Health
8 **Betaine Hydrochloride (HCl)**	Supplement with 1 - 2 g of betaine hydrochloride (HCl) with meals for at least 6 months.	Aging
9 **Calcium**	Supplement with 500 - 1,000 mg of calcium per day.	Calcium
10 **Chamomile Extract**	Supplement with 800 - 1,250 mg of chamomile extract per day.	Stress Response

Note - If you are taking any medications, consult with your practitioner before starting any new supplements as they may have adverse effects with your medications.

Diet

Below is a list of the top dietary recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Diet sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 **Omega-3 Rich Foods**	Consume a diet rich in omega-3 fatty acids.	Aging, Injury Risk - Disc Degeneration, Motivation to Exercise
2 **Dark Chocolate (70-99%)**	Eat approximately 1 oz of dark chocolate per day.	Heart Health, Stress Response
3 **Folate Rich Foods**	Consume a diet rich in folate.	Folate, Heart Health
4 **Magnesium Rich foods**	Consume a diet rich in magnesium.	Heart Health, Stress Response
5 **Mindful Caffeine Intake**	Limit caffeine intake to no more than 100 mg per day or one cup of coffee per day.	Caffeine Metabolism, Caffeine-Related Anxiety
6 **Add Spices to Food**	Add spices such as red pepper, cayenne, or turmeric each day to snacks and meals.	Aging
7 **Almonds**	Eat approximately 1 oz of almonds per day.	Heart Health
8 **Anti-Inflammatory Diet**	Consume a diet rich in anti-inflammatory foods.	Aging
9 **Butternut Squash Seeds**	Consume 1 oz of butternut squash seeds later in the day.	Stress Response
10 **Calcium Rich Foods**	Consume a diet rich in calcium.	Calcium

Lifestyle

Below is a list of the top lifestyle recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Lifestyle sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 **Reduce Stress**	Engage in enjoyable hobbies such as gardening, sports, or other leisure activities to help reduce stress.	Motivation to Exercise, Stress Response
2 **Adequate Sleep**	Aim for the recommended 7 to 8 hours of sleep each night.	Motivation to Exercise
3 **Air Quality**	Avoid exposure to poor air quality conditions by avoiding prolonged time spent outdoors and in poorly venilated areas or by wearing a carbon filtered face mask.	Aging
4 **Chiropractic Spinal Adjustments**	Consider chiropractic spinal adjustments to help reduce lower back pain.	Injury Risk - Disc Degeneration
5 **Cold Exposure**	Use cold exposure, such as cold showers or baths, to increase thermogenesis.	Obesity Predisposition
6 **Intermittent Fasting**	Try intermittent fasting (fasting for 14+ hours daily) or alternate day fasting (fasting for 24 hours every other day).	Heart Health
7 **Limit Alcohol**	Avoid alcohol or limit alcohol to no more than 1 drink per day for women and 2 drinks per day for men.	Heart Health
8 **Reduce Sedentary Behavior**	Reduce sedentary behavior. Try to incorporate small bouts (~ 5 minutes) of standing or moving throughout the day.	Injury Risk - Disc Degeneration
9 **Sunlight**	Get adequate sunlight exposure, approximately 20 minutes per day for most individuals.	Vitamin D3

Exercise

Below is a list of the top exercise recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Exercise sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 **Aerobic Activity**	Aim for 20 to 30 minutes of aerobic physical activity most days of the week.	Stress Response
2 **Do More Than Just Your Daily Exercise Routine**	Do more than just your daily exercise routine to increase physical acitivity and daily calories burned.	Obesity Predisposition
3 **Endurance Training Routine**	Create a well-rounded running schedule that includes distance, intervals, and speed.	Muscle Fiber Type
4 **Hamstring Stretching**	Regularly perform hamstring stretches.	Injury Risk - Disc Degeneration
5 **Lower Limb Resistance Training**	Focus on building strength in the lower limbs through resistance training to reduce injury risk.	Injury Risk - Disc Degeneration
6 **The Right Running Shoe**	Make sure to wear properly fitted running shoes that are appropriate for your foot pronation, mileage, and body weight.	Injury Risk - Disc Degeneration

Further Testing

Below is a list of the top further testing recommendations curated specifically for you. These recommendations may represent a subset of the total recommendations found within the Further Testing sections of your report. Recommendations are listed in order of importance based on your individual genetic results. These recommendations have been reviewed by your healthcare provider. Please contact your provider if you have any questions.

Recommendation Name	The Details	Linked Traits
1 **Folate Testing**	Test folate levels	Aging, Folate
2 **HDL**	Measure HDL cholesterol levels	Heart Health, Saturated Fat Response
3 **Homocysteine Levels**	Check blood homocysteine levels	Aging, Folate
4 **LDL**	Measure LDL cholesterol levels	Heart Health, Saturated Fat Response
5 **Total Cholesterol**	Test total cholesterol level	Heart Health, Saturated Fat Response
6 **Triglyceride**	Test blood triglyceride levels	Heart Health, Saturated Fat Response
7 **4-Point Salivary Cortisol Test**	Perform a 4-Point salivary cortisol test	Stress Response
8 **DEXA Scan**	Perform a DEXA Scan	Calcium
9 **Magnesium**	Test magnesium levels	Heart Health
10 **Methylmalonic Levels**	Test for methylmalonic levels	Vitamin B12

TOOLBOX GENOMICS

Appendix 1

Health Enrichment

October 1, 2019

Demo Client

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Calcium

People with similar genetic markers may be predisposed to lower levels of Calcium.

Gene	SNP	Variant	Impact
CASR	rs1801725	+/+	High
CASR	rs17251221	+/+	High

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Vitamin D3	• Magnesium
	• Calcium	
DIET	• Calcium Rich Foods	
FURTHER TESTING	• DEXA Scan	

Heart Health

People with similar genetic markers may have higher levels of cholesterol, which includes total cholesterol, LDL, and triglycerides.

Gene	SNP	Variant	Impact
APOC3	rs5128	+/+	High

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Spirulina
- Omega-3
- Conjugated Linoleic Acid (CLA)
- Magnesium
- Probiotics
- Pantothenic Acid
- Niacinamide (Vitamin B3)
- Garlic
- Zinc
- Vitamin C
- Berberine
- Vitamin K2 (Menaquinone)
- Plant Sterols
- Green Tea Extract (EGCG)

DIET

- Grass-Fed Butter and Ghee
- Limit Coffee Intake
- Almonds
- Olive Oil
- Folate Rich Foods
- Plant-Based Diet
- Green Tea
- Coconut Oil
- Dark Chocolate (70-99%)
- Magnesium Rich foods
- Heart Healthy Food
- Eliminate All White Foods

LIFESTYLE

- Limit Alcohol
- Intermittent Fasting

FURTHER TESTING

- Triglyceride
- Total Cholesterol
- Magnesium
- HDL
- LDL

Injury Risk - Disc Degeneration

People with similar genetic markers may have an increased risk of degenerative disc disease, which can cause pain in the lower back, neck, hips, or legs.

Gene	SNP	Variant	Impact
CILP	rs2073711	+/+	High

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Collagen	
DIET	• Omega-3 Rich Foods	• Hydration Status
LIFESTYLE	• Reduce Sedentary Behavior	• Chiropractic Spinal Adjustments
EXERCISE	• The Right Running Shoe	• Lower Limb Resistance Training
	• Hamstring Stretching	

Aging

People with genetic markers similar to yours may be predisposed to having higher circulating homocysteine, which is an indicator of inflammation in the body.

Gene	SNP	Variant	Impact
MTR	rs2275565	+/+	High
MTHFR	rs1801133	+/-	Medium
BHMT	rs3733890	+/-	Medium
MTHFR	rs1801131	NR	Not Reportable

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Betaine Hydrochloride (HCl)	• Folate
DIET	• Anti-Inflammatory Diet	• Omega-3 Rich Foods
	• Add Spices to Food	
LIFESTYLE	• Air Quality	
FURTHER TESTING	• Homocysteine Levels	• Folate Testing

Folate

People with similar genetic markers may be predisposed to folate deficiencies.

Gene	SNP	Variant	Impact
FOLH1	rs61886492	+/+	High
MTHFR	rs1801133	+/-	Medium
MTHFR	rs1801131	NR	Not Reportable

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Folate	
DIET	• Folate Rich Foods	
FURTHER TESTING	• Homocysteine Levels	• Folate Testing

Motivation to Exercise

People with similar genetic markers may find it more difficult to stay motivated when exercising or training.

Gene	SNP	Variant	Impact
BDNF	rs6265	+/+	High

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Omega-3	• Magnesium
	• Curcumin	• Sodium Butyrate
DIET	• Omega-3 Rich Foods	
LIFESTYLE	• Adequate Sleep	• Reduce Stress

Obesity Predisposition

People with similar genetic markers may be predisposed to higher lifetime BMI and an increased susceptibility to obesity.

Gene	SNP	Variant	Impact
FTO	rs9939609	+/+	High
FTO	rs1121980	+/+	High
ADIPOQ	rs17300539	+/+	High
ADIPOQ	rs266729	+/-	Medium
ADIPOQ	rs1501299	+/-	Medium
MC4R	rs17782313	-/-	Low
PPARG	rs1801282	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Conjugated Linoleic Acid (CLA)
DIET	• Mediterranean Diet
LIFESTYLE	• Cold Exposure
EXERCISE	• Do More Than Just Your Daily Exercise Routine

Saturated Fat Response

People with similar genetic markers may be predisposed to higher BMIs when consuming high saturated fat diets.

Gene	SNP	Variant	Impact
FTO	rs9939609	+/+	High
FTO	rs1121980	+/+	High
TCF7L2	rs7903146	+/-	Medium
STAT3	rs8069645	-/-	Low
STAT3	rs744166	-/-	Low
APOA2	rs5082	-/-	Low
STAT3	rs1053005	-/-	Low
MC4R	rs12970134	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

DIET

- Reduce Your Dietary Fat Intake
- Monitor Your Saturated Fat Intake

FURTHER TESTING

- Triglyceride
- Total Cholesterol
- HDL
- LDL

Stress Response

People with similar genetic markers may be predisposed to greater cortisol reactivity, as well as greater anticipatory cortisol response, which can be accompanied by adverse physiological effects

Gene	SNP	Variant	Impact
COMT	rs4680	+/-	Medium
BDNF	rs6265	-/-	Low
HTR2C	rs6318	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Magnesium
- Rhodiola Extract
- Chamomile Extract

DIET

- Dark Chocolate (70-99%)
- Magnesium Rich foods
- Butternut Squash Seeds

LIFESTYLE

- Reduce Stress

EXERCISE

- Aerobic Activity

FURTHER TESTING

- 4-Point Salivary Cortisol Test

Vitamin B12

People with similar genetic markers may be predisposed to low vitamin B12 levels.

Gene	SNP	Variant	Impact
FUT2	rs1047781	+/+	High
FUT2	rs602662	+/-	Medium
FUT2	rs601338	+/-	Medium
TCN1	rs526934	+/-	Medium
CUBN	rs1801222	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT	• Vitamin B12
DIET	• Vitamin B12 Rich Foods
FURTHER TESTING	• Methylmalonic Levels

Vitamin D3

People with similar genetic markers may be predisposed to low levels of vitamin D3.

Gene	SNP	Variant	Impact
CYP2R1	rs10741657	+/+	High
GC	rs4588	+/-	Medium
GC	rs2282679	+/-	Medium
DHCR7	rs12785878	-/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

SUPPLEMENT

- Vitamin D3
- Probiotics
- Vitamin D & K Supplement Combination

LIFESTYLE

- Sunlight

FURTHER TESTING

- Vitamin D3 (25-OH)

Caffeine-Related Anxiety

People with genetic markers similar to yours may experience increased anxiety after drinking caffeine.

Gene	SNP	Variant	Impact
ADORA2A	rs5751876	+/+	High

Recommendations

These recommendations are based on the genetic findings in the chart above.

DIET

- Mindful Caffeine Intake

Iron

People with similar genetic markers are more likely to have normal iron levels.

Gene	SNP	Variant	Impact
TMPRSS6	rs855791	+/+	High
HFE	rs1800562	+/+	High
HFE	rs1799945	+/-	Medium

Caffeine Metabolism

People with similar genetic markers may be more sensitive to caffeine and may feel the effects of caffeine faster and longer.

Gene	SNP	Variant	Impact
CYP1A2	rs762551	+/-	= Medium

Recommendations

These recommendations are based on the genetic findings in the chart above.

DIET

- Mindful Caffeine Intake

Muscle Fiber Type

People with similar genetic markers are more likely to have Type 1, slow-twitch, endurance-type muscle fibers.

Gene	SNP	Variant	Impact
PPARA	rs4253778	+/+	High
PPARGC1A	rs8192678	+/+	High
ACTN3	rs1815739	+/-	Low

Recommendations

These recommendations are based on the genetic findings in the chart above.

EXERCISE

- Endurance Training Routine

Recommendation Detailed Appendix

TOOLBOX GENOMICS

Appendix 2

Health Enrichment

October 1, 2019

Demo Client

Kit #1234ABCD5678

Supplements

Recommendation Name	The Details	Linked Traits
Magnesium	Supplement with 300 - 500 mg of magnesium per day.	Calcium, Heart Health, Motivation to Exercise, Stress Response
Conjugated Linoleic Acid (CLA)	Supplement with 2 - 4 g of conjugated linoleic acid (CLA) per day.	Heart Health, Obesity Predisposition
Folate	Supplement with 400 - 800 mcg of methyl-folate per day.	Aging, Folate
Omega-3	Supplement with 2 - 5 g of omega-3 fatty acid supplement that contains essential fatty acids DHA and EPA.	Heart Health, Motivation to Exercise
Probiotics	Supplement with a 10 - 50 billion CFU probiotic per day.	Heart Health, Vitamin D3
Vitamin D3	Supplement with 3,000 IUs of vitamin D3 per day.	Calcium, Vitamin D3
Berberine	Supplement with 1,500 mg of berberine per day.	Heart Health
Betaine Hydrochloride (HCl)	Supplement with 1 - 2 g of betaine hydrochloride (HCl) with meals for at least 6 months.	Aging
Calcium	Supplement with 500 - 1,000 mg of calcium per day.	Calcium
Chamomile Extract	Supplement with 800 - 1,250 mg of chamomile extract per day.	Stress Response
Collagen	Supplement with 5 - 15 g of collagen per day.	Injury Risk - Disc Degeneration
Curcumin	Supplement with 250 - 2,000 mg of curcumin extract per day.	Motivation to Exercise
Garlic	Supplement with 400 - 1,200 mg of garlic extract per day.	Heart Health
Green Tea Extract (EGCG)	Supplement with 300 - 400 mg of green tea extract per day.	Heart Health
Niacinamide (Vitamin B3)	Supplement with 1 - 3 g of niacinamide (vitamin B3) per day.	Heart Health
Pantothenic Acid	Supplement with 900 mg of pantothenic acid (Vitamin B5) per day.	Heart Health
Plant Sterols	Try consuming 2 g of plant sterols per day.	Heart Health
Rhodiola Extract	Supplement with 400 mg of rhodiola extract per day.	Stress Response
Sodium Butyrate	Supplement with 300 mg of sodium butyrate per day.	Motivation to Exercise
Spirulina	Supplement with 2 g of spirulina per day.	Heart Health
Vitamin B12	Supplement with 500 mcg of vitamin B12 per day.	Vitamin B12
Vitamin C	Supplement with 500 - 1,000 mg of vitamin C per day.	Heart Health
Vitamin D & K Supplement Combination	Supplement with 4,000 - 5,000 IUs of Vitamin D3 with 50 mcg plus 1,000 mcg of combination Vitamin K1 and K2 per day.	Vitamin D3

Vitamin K2 (Menaquinone)	Supplement with 100 - 200 mcg of vitmain K2 per day.	Heart Health
Zinc	Supplement with 10 - 40 mg of zinc per day.	Heart Health

Diet

Recommendation Name	The Details	Linked Traits
Omega-3 Rich Foods	Consume a diet rich in omega-3 fatty acids.	Aging, Injury Risk - Disc Degeneration, Motivation to Exercise
Dark Chocolate (70-99%)	Eat approximately 1 oz of dark chocolate per day.	Heart Health, Stress Response
Folate Rich Foods	Consume a diet rich in folate.	Folate, Heart Health
Magnesium Rich foods	Consume a diet rich in magnesium.	Heart Health, Stress Response
Mindful Caffeine Intake	Limit caffeine intake to no more than 100 mg per day or one cup of coffee per day.	Caffeine Metabolism, Caffeine-Related Anxiety
Add Spices to Food	Add spices such as red pepper, cayenne, or turmeric each day to snacks and meals.	Aging
Almonds	Eat approximately 1 oz of almonds per day.	Heart Health
Anti-Inflammatory Diet	Consume a diet rich in anti-inflammatory foods.	Aging
Butternut Squash Seeds	Consume 1 oz of butternut squash seeds later in the day.	Stress Response
Calcium Rich Foods	Consume a diet rich in calcium.	Calcium
Coconut Oil	Replace vegetable cooking oil with coconut oil to increase healthy fatty acid intake.	Heart Health
Eliminate All White Foods	Elminate all white foods such as bread, white rice, and potatoes from the diet.	Heart Health
Grass-Fed Butter and Ghee	Consume 1 to 3 tbsp of butter or ghee from grass-fed cattle to increase daily essential fatty acid intake.	Heart Health
Green Tea	Aim to drink 1 to 3 cups of green tea per day.	Heart Health
Heart Healthy Food	Add a variety of heart healthy foods including healthy oils, nuts, and dark chocolate to the daily diet.	Heart Health
Hydration Status	Drink plenty of fluids throughout the day, aim to consume at least 64 oz per day.	Injury Risk - Disc Degeneration
Limit Coffee Intake	Drink no more than 3 cups of coffee per day.	Heart Health
Mediterranean Diet	Adopt a Mediterranean-style diet that includes a variety of antioxidant-rich foods, heart healthy fats, and complex carbohydrates.	Obesity Predisposition
Monitor Your Saturated Fat Intake	Limit saturated fats in the diet to no more than 22 g per day.	Saturated Fat Response

Olive Oil	Choose olive oil as the main source of fat in the diet by replacing vegetable cooking oils with olive oil and using olive oil-based dressings.	Heart Health
Plant-Based Diet	Consume a diet that is focused on whole, unprocessed plant-based foods and whole grains.	Heart Health
Reduce Your Dietary Fat Intake	Reduce the amount of fat in the diet to no more than 20% of total daily caloric intake (no more than 22 g of saturated fat).	Saturated Fat Response
Vitamin B12 Rich Foods	Consume a diet rich in vitamin B12.	Vitamin B12

Lifestyle

Recommendation Name	The Details	Linked Traits
Reduce Stress	Engage in enjoyable hobbies such as gardening, sports, or other leisure activities to help reduce stress.	Motivation to Exercise, Stress Response
Adequate Sleep	Aim for the recommended 7 to 8 hours of sleep each night.	Motivation to Exercise
Air Quality	Avoid exposure to poor air quality conditions by avoiding prolonged time spent outdoors and in poorly venilated areas or by wearing a carbon filtered face mask.	Aging
Chiropractic Spinal Adjustments	Consider chiropractic spinal adjustments to help reduce lower back pain.	Injury Risk - Disc Degeneration
Cold Exposure	Use cold exposure, such as cold showers or baths, to increase thermogenesis.	Obesity Predisposition
Intermittent Fasting	Try intermittent fasting (fasting for 14+ hours daily) or alternate day fasting (fasting for 24 hours every other day).	Heart Health
Limit Alcohol	Avoid alcohol or limit alcohol to no more than 1 drink per day for women and 2 drinks per day for men.	Heart Health
Reduce Sedentary Behavior	Reduce sedentary behavior. Try to incorporate small bouts (~ 5 minutes) of standing or moving throughout the day.	Injury Risk - Disc Degeneration
Sunlight	Get adequate sunlight exposure, approximately 20 minutes per day for most individuals.	Vitamin D3

Exercise

Recommendation Name	The Details	Linked Traits
Aerobic Activity	Aim for 20 to 30 minutes of aerobic physical activity most days of the week.	Stress Response
Do More Than Just Your Daily Exercise Routine	Do more than just your daily exercise routine to increase physical acitivity and daily calories burned.	Obesity Predisposition

Endurance Training Routine	Create a well-rounded running schedule that includes distance, intervals, and speed.	Muscle Fiber Type
Hamstring Stretching	Regularly perform hamstring stretches.	Injury Risk - Disc Degeneration
Lower Limb Resistance Training	Focus on building strength in the lower limbs through resistance training to reduce injury risk.	Injury Risk - Disc Degeneration
The Right Running Shoe	Make sure to wear properly fitted running shoes that are appropriate for your foot pronation, mileage, and body weight.	Injury Risk - Disc Degeneration

Further Testing

Recommendation Name	The Details	Linked Traits
Folate Testing	Test folate levels	Aging, Folate
HDL	Measure HDL cholesterol levels	Heart Health, Saturated Fat Response
Homocysteine Levels	Check blood homocysteine levels	Aging, Folate
LDL	Measure LDL cholesterol levels	Heart Health, Saturated Fat Response
Total Cholesterol	Test total cholesterol level	Heart Health, Saturated Fat Response
Triglyceride	Test blood triglyceride levels	Heart Health, Saturated Fat Response
4-Point Salivary Cortisol Test	Perform a 4-Point salivary cortisol test	Stress Response
DEXA Scan	Perform a DEXA Scan	Calcium
Magnesium	Test magnesium levels	Heart Health
Methylmalonic Levels	Test for methylmalonic levels	Vitamin B12
Vitamin D3 (25-OH)	Test blood levels of vitamin D3 (25-OH)	Vitamin D3